**Unit 1 Interactions and Ecosystems – Review for Section 2 and 3**

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What kind of consumer eats only producers?
2. What kind of organism consumes only consumers?
3. What kind of organism consumers both producers and other consumers?
4. What are the three things a producer (plant) needs to make food?
5. How is photosynthesis similar but different to cellular respiration?
6. Are you a producer or consumer?
7. What is the role of bacteria, mold, and fungi in an ecosystem?
8. What effects would there be if all of the decomposers were to be eliminated?
9. What is the difference between a food web and a food chain?
10. Draw a food chain that includes: grass, snake, frog, grasshopper, sun
11. A) Draw a food pyramid that shows the biomass of the following: (tertiary consumer, producer, secondary consumer, primary consumer)

B) What organism is on the bottom of the pyramid and WHY are there so many of that organism compared to higher up in the pyramid?

C) What percentage of the energy is passed on to the next level in the pyramid?

1. What are at least two ways carbon gets into our atmosphere?
2. How does carbon get taken out of our atmosphere?
3. A) All living things need water to live. Draw a little sketch of the water cycle including: evaporation, condensation, precipitation, transpiration.

B) What are the two processes of the water cycle that release water back into the atmosphere?

C) Which process of the water cycle is happening when clouds are formed?

1. A) Coyotes eat small mammals like ground squirrels. If the population of squirrels steadily increases over time, what is likely to happen to the coyote population?

B) If the squirrel population sudden gets destroyed by a squirrel-killing disease, how will this affect the coyote population?

1. Scientists monitor ecosystems to monitor change. Why do scientists use sampling to gather information about an area?
2. What is it called when a species that are not native to a particular area are introduced and multiply quick so that they take over an ecosystem and rob the native species of food or nutrients.
3. Why do living things need to compete for food, water, and habitat?
4. Name two ways that weather can affect ecosystems.
5. Primary succession is the gradual growth of organisms in an area that was previously bare – like a rocky slope. What are the first organisms that are most likely to appear that will help break down rock?
6. Secondary Succession is the gradual growth of organisms in an area after a disturbance. A climax community is a stable community with a lot of diversity and is not easily replaced by other communities.

Label the following examples as being situation where either P(primary succession) or S (secondary succession) will take place, or indicate if it is a climax community (C).

\_\_\_\_\_\_\_ The forest in Banff National Park has been around for hundreds of years

\_\_\_\_\_\_\_ New lava from a volcano makes a new island

\_\_\_\_\_\_\_A farmer clears the land of trees and shrubs so he can farm

\_\_\_\_\_\_\_ A construction worker digs up the land to lay pipe in the ground and then covers up the pipe

\_\_\_\_\_\_\_Igneous rock is exposed on the mountain face after a landslide

\_\_\_\_\_\_\_ The Japanese paintings of the rainforest looks nearly the same today as it did 500 years ago

\_\_\_\_\_\_\_a hurricane rips out trees and other plants in its fury

\_\_\_\_\_\_\_ a forest fire devastates an area

\_\_\_\_\_\_\_a glacier recedes and scrapes away earth, leaving bare rock in its path

1. How does the population of prey affect the population of it’s predator?